

Remarks

Claims 2, 3, and 5 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In claim 2, the phrase “such as” has been deleted to more particularly point out and distinctly claim the subject matter that Applicants regard as their invention. Claim 3 has been cancelled with the portion of claim 3 incorporated into claim 1 not including the phrase “the selected route.” Claim 5 has been amended to refer to the starting location and the destination in lines 7 and 8, respectively, thereby rendering the limitations consistent with their antecedents.

Claims 1-11 stand rejected under 35 U.S.C. § 102 as being anticipated by Roeseler et al. (U.S. Patent No. 6,317,684).

In response to the rejection of the claims as being anticipated by Roeseler, Applicants have amended claims 1 and 5 to focus on the concept of a system and method wherein alternate route information may be provided to the driver of a vehicle only if it provides an improved route as determined by preset user preference data. This concept was previously the focus of claims 4 and 6 and is not disclosed or suggested by the Roeseler patent. The Examiner’s rejection of claims 4 and 6 rested upon the interpretation of a portion of the Roeseler patent that does not disclose the claimed concept.

In regard to claim 4, the Examiner states that information regarding the alternate route is selectively provided only when the alternate route would provide a predetermined improvement and efficiency as measured by a selected parameter. The Examiner cites the following portion of Roeseler:

If new traffic or road condition changes affect the caller’s route or if the caller fails to follow the turn-by-turn instructions, the controller 310 may re-plan a new route and send navigation instructions to the caller via the speech synthesizer 380, when the caller is close to the next turn. If the route is changed by the controller 310, an explanation and the reasons for the change may be provided automatically, or at caller’s request.

Column 7, lns. 30-37.

Claim 6 is rejected by the Examiner's reasoning that information is provided to the driver to evaluate and select between the previously selected route and the alternate route upon receiving a request from the user or when the alternate route would provide a predetermined degree of improvement and efficiency in reference to at least one selected parameter. The Examiner relies upon the following portion of the Roeseler specification:

Once the controller 310 has calculated the caller's route, the route is output to the caller by way of audio, printer, computer, etc. via the speed synthesizer, or a human operator through a network interface 340. The controller 310 then queries the caller as to whether the calculated route is acceptable, or if the caller desires, to alter the route or provide additional instructions.

Column 5, Ins. 62-67.

The invention as now claimed focuses on a system and method wherein unnecessary distractions from a navigation system may be eliminated. It is important to eliminate unnecessary distractions to drivers. As noted in the background section of the application, based upon the state of the art at the time of Applicants' invention, one of the problems addressed was characterized as follows:

There is a need for a system that offers optional routing along the way with intelligence as to a user's preferences in filtering of information provided to a driver based upon a level of increased efficiency as measured by one or more parameters.

Specification, Page 2, Ins. 11-15.

As amended, Applicants now claim their solution to this need that is not disclosed or suggested in Roeseler or any of the other patents that the Examiner has characterized as being pertinent to Applicants' disclosure.

The Roeseler patent and several of the patents that were indicated by the Examiner to be considered pertinent would create a system wherein the driver would be continuously distracted by unwanted information from the navigation system. The Roeseler patent envisions a system where the controller 310 repeatedly queries the caller as to whether the calculated route is acceptable which the caller must answer or indicate their approval.

The Kozak patent (U.S. Patent No. 6,317,685) provides for a threshold that is based upon a comparison of the actual travel time to the estimated travel time. When the actual travel time exceeds the estimated travel time, the driver is prompted and the system then asks the user to indicate whether an alternate route is desired. The user is required to respond to the request by operating a device keypad 36 or other manual input device or by using voice commands. In any event, this system would ultimately prove to be an annoyance to the driver.

The Herbst patent (U.S. Patent No. 6,321,161) provides for a detour evaluation feature that evaluates the cost of travel caused by deviations from the prescribed route. A threshold factor may be set by the user and as stated at column 9, lns. 9-16 one embodiment of the Herbst system is described as follows:

The indication can be expressed as text (e.g., "DON'T TURN RIGHT AT THE UPCOMING INTERSECTION") or a graphical display on the display screen 42 (in FIG. 1) or an audio message conveyed over the speaker 43 (in FIG. 1). One example of a graphical display showing an indication 144 not to make a right turn at an intersection being approached is shown in FIG. 7.

The system described in Herbst would create an endless stream of audio and graphical interruptions to a driver as each intersection is passed that would present an unacceptable detour.

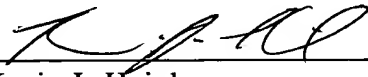
These approaches would be unacceptable to most drivers and would provide additional distractions instead of a system that provides helpful information that improves the effectiveness of a navigation system according to the user's preference data.

Applicants have amended the claims of the application as originally submitted to overcome the Examiner's objections under 35 U.S.C. § 112 and to distinguish the prior art Roeseler patent. Applicants have attempted to place this case in condition for allowance by

the above amendments. The Examiner is invited to telephone Applicants' attorney if it would advance the prosecution of this case. The Examiner is respectfully requested to pass this case to issue.

Respectfully submitted,

ANDREA BOWES CHOWANIC et al.

By 
Kevin J. Heint
Reg. No. 29,805
Attorney/Agent for Applicant

Date: January 7, 2003

BROOKS & KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075
Phone: 248-358-4400
Fax: 248-358-3351

Attachment



SN: 00/802,587

Atty Dkt No. 201-0005/FMC 1340 PLS

RECEIVED
JAN 21 2003
GROUP 3600

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A navigation system for a vehicle that provides routing information while traversing a route, comprising:

a data processor having a database of routing information over which a land vehicle may travel, the data processor being programmable with a starting point and a destination point, the data processor being provided with user preference data, the data processor being provided with realtime parameters that are used in providing previously selected route between the starting point and the destination point that is selected prior to beginning traversing the route;

a global positioning system (GPS) providing a set of current location data corresponding to the current location of the vehicle;

the data processor providing an alternative route to the destination point based upon the set of current location data, user preference data and a set of updated realtime parameters that provides the user with the alternative route while traversing the previously selected route wherein the set of real time parameters are used by the data processor depending upon availability in calculating an alternate route, comparing the previously selected route to the alternate route, and providing information to driver to evaluate and select between the previously selected route and the alternate route only when the alternate route would provide a predetermined improvement in efficiency as measured by the user preference data.

2. (Amended) The navigation system of claim 1 wherein the user preference data comprises one of the following criteria: [such as] shortest time, shortest distance, maximizing use of freeways, minimizing use of freeways, maximizing use of toll roads, and minimizing use of toll roads.

5. (Amended) A method of navigating to a destination utilizing a data processing system:

- inputting a starting location;
- inputting a destination location;
- inputting a set of real time parameters;
- inputting a set of user preferences;

calculating at least one route from the [staring point] starting location to the destination location including factoring in the effect of the real time parameters and user preferences;

selecting one of the routes and traveling along a selected route toward the destination;

updating the set of real time parameters to create an updated set of real time parameters while traveling along the selected route;

calculating an alternate route from an intermediate location to the destination location based upon the updated set of real time parameters;

comparing the selected route to the alternate route; and

providing information to a driver to evaluate and choose between the selected route and the alternate route, the choice of the driver thereafter being the selected route for the

continuation of traveling to the destination location wherein the steps of updating the set of real time parameters, calculating an alternate route, comparing the previously selected route to the alternate route, are repeated in response to each update of the real time parameters while traveling along the selected route and the step of providing information to the driver to evaluate and select between the previously selected route and the alternate route is repeated only when the alternate route would provide a predetermined degree of improvement in efficiency in reference to at least one selected user preference.

7. The method of navigating to a destination of claim [6] 5 wherein the step of providing information to the user is repeated only when the alternate route results in a reduction of the time of travel from the intermediate location to the destination location.

8. The method of navigating to a destination of claim [6] 5 wherein the step of providing information to the user is repeated only when the alternate route results in a reduction of the cost of travel from the intermediate location to the destination location.